

McFilter.tiff ~v2.0

McFilter is an image conversion filter service. It allows you to convert GIF and JPEG (JFIF) images for preview and use in any NeXTSTEP program that implements filter service recognition. **McFilter is freeware, so feel free to distribute it to anyone you wish. Please distribute this README file as well.**

336050_TaskArrowSm.tiff ~ Using McFilter

McFilter, and for that matter all image filter services, have no application interface. Filter services are a background resource utilized by other apps to convert images. Some examples of standard NeXTSTEP apps that will recognize image filters are Preview.app, Edit.app, IconBuilder.app, and Mail.app. Many third-party apps do as well.

For example, you can command-drag any GIF or JPEG file icon onto the app icon of Preview.app. Also, you can use the open panel, in which you'll notice that files with .gif, .GIF, .giff, .GIFF, .jpg, .JPG, .jpeg, .JPEG, .jff, or .jfif extensions will appear in the browser. In Mail.app or Edit.app, for example, you can just drag a GIF or JPEG file icon from the Workspace into a document window (or a Compose window in the case of Mail.app) and the converted image will just appear. Please note that anyone you send such e-mail to will need to have McFilter installed to similarly view the converted image (the original image format is sent in the e-mail message).

TaskArrowSm.tiff ~ Gamma Correction

The advantage of McFilter is that you can select a *gamma correction factor* during conversion that will significantly improve the color saturation and contrast of the converted GIF or JPEG images. Simply use the slider or text field to select a global gamma correction factor that will be applied to any subsequent conversions. I recommend you start with a factor of 1.5, then adjust up or down accordingly.

19856_TaskArrowSm.tiff ↪ Console Messages

If you wish, McFilter will output a one line status message in your console at the beginning of each conversion. This message will tell you the size of the image providing you with information to help judge the time required for the conversion to complete. Console messages are also an easy way to verify that McFilter is indeed functioning, instead of some other image filter service.

495535_TaskArrowSm.tiff ↪ Installation

To install, just copy the McFilter.preferences module into your ~/Library/Preferences directory. Then copy the McFilter.service module into your ~/Library/Services directory and then logout and log back in to update your services.

547827_TaskArrowSm.tiff ↪ Conflicts with Other Services

I prefixed the McFilter.services module with "A_" in order to help guarantee that McFilter handles all GIF or JPEG conversions. Whichever service in ~/Library/Services that is parsed first during login will become the selected service for a respective image type. Arrange your image filtering

services in your ~/Library/Services directory in order of preference using alphabetical ordering. This isn't very clean, but is the only solution I know of at this time short of editing each image filter's *services* file. Also, any services in your ~/Library/Services directory should take precedence over services installed in /NextLibrary/Services or /LocalLibrary/Services.

13286_TaskArrowSm.tiff ↪ Timeouts during Conversion

The services file, contained in the A_McFilter.service wrapper, has a specified timeout of 120 seconds. This timeout period is the amount of time any app waits for the image conversion to complete before assuming an error may have occurred. For very large images (images 1600 x 1600 pixels in size or more), this timeout period may not be adequate. For such cases, open the services file in the A_McFilter.service directory, and change the timeout period to 180000 (for 3 minutes) or more. You'll probably have to logout and login again for the change to be recognized. (I personally have some *very* large JPEG images that require a timeout period of around 3 minutes.) Increasing the timeout period has the disadvantage of spinning apps (i.e. locking out user events) if an image file is corrupted or the conversion process results in an error message. If you see a normal conversion message printed to the console but the app you're working in gives an error message a timeout has probably occurred.

707996_TaskArrowSm.tiff ↪ Conflicts with ImageViewer.app (version 0.9i)

ImageViewer.app has three problems in my opinion:

- 1) I don't like the image icons provided with the app.
- 2) It doesn't do gamma correction.
- 3) It declares its image filter service within the application wrapper, which causes

ImageViewer.app to take precedence over *any* other image filters you have installed.

Number **1**) can be remedied by getting a demo of ImageAgent (by Bacchus) from the archives and installing the provided IA-IconList.app. This app registers nice looking icons in the Workspace for GIF and JPEG image files. (Also, you may have another application other than ImageViewer which registers icons for GIF and JPEG image files. In that case, you don't need the IA-IconList.app.)

Number **2**) is provided by McFilter.

Number **3**) can be remedied by moving ImageViewer.app out of ~/Apps or ~/LocalApps (or any app directory parsed at login time, "dread Workspace ApplicationPaths" on the command line will show you any additional directories you should worry about). *As an alternative*, you can edit the services file in the ImageViewer.app application wrapper (make a backup first). Remove all lines which contain gif, GIF, jpg, or JPG. An already edited services file is provided below for your convenience.

services ↪ Edited *services* file for the ImageViewer.app directory.

Open the ImageViewer.app wrapper using Workspace's "Open as Folder" menu item. Then drag the above services file into the ImageViewer.app directory (you might rename the original first to preclude overwriting the original). Then logout and login. McFilter should then convert GIF and JPEG images instead of ImageViewer.app (remember to turn on Console Messages in McFilter's preference window to verify McFilter is converting the images).

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Please send any questions you have about McFilter to me before posting questions to the comp.sys.next groups. I'm always glad to help. Also, if you run into an image that doesn't convert properly, I'd really appreciate a NeXTmailed copy in order to correct my code. It's hard for me to test all variations of an image format that you may encounter. Thanks.

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This software is based in part on the work of the Independent JPEG Group.